

## Hybrid Micro Energy Program Award No. 01163

Quarterly Report: July 1, 2012 to September 30, 2012

Per the terms of the Hybrid Micro-Energy Program (HMEP) grant agreement, the three priority renewable energy systems to be evaluated are:

A small scale biomass combined heat and power (CHP) system that can convert wood into heat and power for use in small scale loads including residences, small community facilities, and potentially small communities and/or neighborhoods.

This portion of the grant was completed with the submission of the final report on March 29<sup>th</sup>.

A ground source heat pump project that includes solar thermal collection to recharge the ground

The school district has been working on the ground source heat pump system at Weller Elementary School. Neither the solar thermal panels nor the heat pump is currently running. The school district is still working with the manufacturer to repair the main circuit board on the heat pump. In the meantime, the data collection system is functioning and poised to record information relating to the ground source heat pump and solar thermal collectors once operational.

CCHRC is working with our partners at the school district to resolve on-going mechanical problems with the heat pump.

A combined solar photovoltaic (PV) and wind system integrated into an energy efficient load design.

This portion of the grant was completed with the submission of the final report on March 29<sup>th</sup>.